

ABSTRACT

We describe a bacterial delivery system for the delivery of DNA and antigens into cells.

- 5 We constructed an attenuated bacterial vector which enters mammalian cells and ruptures delivering functional plasmid DNA and antigens into the cell cytoplasm. This *Shigella* vector was designed to deliver DNA to colonic surfaces, thus opening the possibility of oral and other mucosal DNA immunization and gene therapy strategies. The attenuated *Shigella* is also useful as a vaccine for reducing disease symptoms caused by *Shigella* .

10